



Bureau of Environmental
BEHA
Health Assessment

Wilmington Childhood Cancer Study FACT SHEET

August 2002

Why is a childhood cancer study being conducted in Wilmington?

In 1999, concerned residents and the Wilmington Board of Health asked the Massachusetts Department of Public Health (MDPH), Bureau of Environmental Health Assessment (BEHA), Community Assessment Program (CAP) to investigate a reported cluster of childhood cancer in Wilmington, Massachusetts. Initial concerns focused on a number of children diagnosed with brain cancer, Hodgkin's disease, leukemia, and non-Hodgkin's lymphoma residing in the Kelly Hill neighborhood, located on the west side of town, and the town as a whole between the years 1990 and the present.

What do the data on childhood cancer in Wilmington show to date?

In July of 2000, the CAP reviewed data on childhood cancer in Wilmington for the years 1987-1995, the most recent and complete data available at the time. During these years, one child was diagnosed with brain cancer, four children were diagnosed with leukemia, and one child was diagnosed with Hodgkin's disease. There were no children diagnosed with non-Hodgkin's lymphoma in Wilmington during this time period. All of the children lived in two of the four Wilmington census tracts (CTs) that geographically subdivide the town (CTs 3312 and 3313). Census tract 3313 is the area where the Kelly Hill neighborhood is located.

In July of 2002, the CAP reviewed more recent data available from the MCR for the years 1996-1998. During these three years, one child was diagnosed with leukemia. This child lived in CT 3312 at the time of diagnosis. There were no children diagnosed with brain cancer, Hodgkin's disease or non-Hodgkin's lymphoma during this time period.

Is the rate of childhood cancer in Wilmington elevated?

Within census tracts 3312 and 3313, which are located on the west side of Wilmington, there were more children diagnosed with brain cancer, leukemia and Hodgkin's disease during 1987-1995 than expected based on state-wide childhood cancer rates. Similar patterns were seen when the data was updated to include the years 1996-1998. However, because these comparisons are based on small numbers, their statistical meaning is difficult to interpret with confidence. It is also important to note that early reports from concerned Wilmington residents indicated that a

number of children were reportedly diagnosed after 1998. No information on the pattern of childhood cancer for the years 1999 to the present is available at this time.

Has childhood cancer in Wilmington been linked to a specific environmental exposure?

To date, no specific pathway of environmental exposure has been linked to childhood cancer in Wilmington. A number of environmental concerns have been raised by the Wilmington community including questions about drinking water quality and dumping of hazardous materials at several businesses and sites located throughout the town. The MDPH childhood cancer study will investigate whether an environmental exposure pathway is likely to be related to childhood cancer in Wilmington.

How will the study evaluate childhood cancer concerns up to the present?

A questionnaire has been developed to collect and evaluate information on cancer risk factors that may be related to childhood cancer in Wilmington. Data collected with the questionnaire will be used to evaluate whether Wilmington children diagnosed with cancer share any common patterns or risk factors, including possible environmental factors. In addition, the information collected will be used to help evaluate whether there are differences between children who have been diagnosed with cancer and those who lived in Wilmington at the same time but have not been diagnosed with cancer.

Since an important piece of the Wilmington childhood cancer investigation involves potential environmental exposures, information generated from several sources, including the Town of Wilmington, the Massachusetts Department of Environmental Protection, and the United States Environmental Protection Agency will be evaluated in conjunction with information collected through the questionnaire.

What information is being collected as part of the study?

Because little is known about environmental exposures and children's health, the questionnaire is designed to collect information about a variety of topics. These include residential history, family medical history, parental occupational history, hobbies/activities, and products used in or around the home. In addition, information from both the child and mother's medical records will be used to supplement information gathered through the personal interview.

Who will be asked to participate in the study?

Mothers or primary care-givers of children diagnosed with cancer between 1987 and 2000 while living in Wilmington will be asked to participate in interviews for the childhood cancer study. In addition, parents of Wilmington children who have not been diagnosed with cancer will be asked to participate to provide a comparison group. These children were randomly selected for

participation from Wilmington school or birth records and were matched on age and gender to a child who had been diagnosed with cancer.

How and when will families be contacted to participate?

Families are currently being contacted via mail regarding participation in the study. Attempts to recruit study participants will continue throughout the summer and fall of 2002. A total of approximately 100 families are needed to participate in the study. If you have received a letter requesting your participation, please return the participation form to MDPH so that an interview can be scheduled.

Can anyone volunteer to be in the comparison group?

Unfortunately, people cannot volunteer to be study participants. In order to ensure that the comparison group is representative of the community as a whole, it is necessary to randomly select study participants through a scientific process.

Is the MDPH working with Wilmington community members in conducting the study?

Shortly after learning about childhood cancer concerns in Wilmington, the MDPH began meeting with a community advisory committee, Kelly Hill Area Community Advisory Committee. The meetings have been attended by interested residents and members of the Wilmington Board of Health who wish to provide information about childhood cancer and environmental concerns and learn more about the study.

Whom do I contact to get more information about the study?

For more information about the Wilmington Childhood Cancer Study or future Kelly Hill Group meetings, please contact Theresa Cassidy or Patricia Miskell in the MDPH Community Assessment Program at 617-624-5757 or 1-800-319-3042.